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8 BEFORE THE STATE OF WASHINGTON  
9 ENERGY FACILITY SITE EVALUATION COUNCIL

10 IN THE MATTER OF  
11 APPLICATION NO. 96-1

EXHIBIT \_\_\_\_

12  
13 OLYMPIC PIPELINE COMPANY  
14 CROSS CASCADE PIPELINE PROJECT  
15  
16

17 **PREFILED DIRECT TESTIMONY**  
18

19 **WITNESS:** MORRIS L. UEBELACKER

20 **ISSUES:** CULTURAL RESOURCES, YAKAMA TREATY PROTECTED  
21 PRACTICES, AND OTHER YIN INTERESTS PERTAINING  
22 TO CULTURAL RESOURCES

23 **SPONSOR:** YAKAMA INDIAN NATION  
24  
25

1 **Q Please state your full name and business address?**

2 A Morris Leo Uebelacker, Central Washington University, Lind Hall, Room 119, 400 East  
3 8<sup>th</sup> Avenue, Ellensburg, WA 98926.  
4

5 **Q What will you be testifying about?**

6 A I will be testifying to the traditional and customary uses of the Mid Columbia and Upper  
7 Yakima River Basins by the Yakama people, the resources and cultural places located  
8 within these regions, their importance and value to the Yakama people, and the potential  
9 impact to these resources and places posed by the proposed cross cascade pipeline.  
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11

12 **Q Please tell us your educational and employment history.**

13 A I refer you to Exhibit One, which is my Vita, and summarizes my educational and  
14 employment history. As that document indicates I have a Bachelors of Science in  
15 Anthropology from Central Washington University in 1975, a Master of Arts in  
16 Anthropology from the University of New Mexico in 1977, and a Doctor of Philosophy  
17 in Geography from the University of Oregon in 1986.  
18

19 I currently teach and do research at Central Washington University as a Professor  
20 of Geography in the Department of Geography and Land Studies. I teach a wide variety  
21 of classes at both the Undergraduate and Graduate levels and specialize in land use  
22 history and landscape change. Over the past four years I have focused my research on  
23 Native American land use patterns in Kittitas County. This included research aimed at  
24 the construction of a "Native American Traditional Resource Value Map" for Kittitas  
25 County. Prior to my joining the teaching staff at CWU I spent several years working for

1 the Yakama Indian Nation on a wide variety of land use projects. This work was focused  
2 on assessing the impacts to Tribal traditional resources and places.

3  
4 **Q Are you familiar with the landscape and resources located within the Upper Yakima**  
5 **and Mid Columbia River Basins? If so, how have you gained this familiarity?**

6 **A** My familiarity with these regions began as a child. I was born in this region. My  
7 mother's family farmed on the Yakama Indian Reservation and my father's family lived in  
8 Ellensburg. My family members had direct knowledge of the land and shared this  
9 knowledge with me. I spent my summers on the Reservation and also began to know and  
10 learn from the Indian people there. It was this experience that initiated my pursuit of  
11 understanding how the landscape had and is changing and how indigenous people  
12 interacted with the landscape.

13  
14 During my undergraduate years I worked in the Okanogan area, the Upper  
15 Columbia region, and near the mouth of the Yakima River. During my graduate years I  
16 focused on the traditional land use of the Yakima River landscape. Later, as a consultant  
17 with the YIN (8 years) I worked on land use and cultural issues for projects across the  
18 Ceded lands and other usual and accustomed places of the Yakama people. Through this  
19 work I came to know well the customs and traditions of the Yakama people, and I am  
20 consequently very familiar with the traditional and cultural uses made of the lands within  
21 the Ceded Lands of the Yakama, including the Mid-Columbia and Upper Yakima River  
22 Basins. These are lands that the proposed pipeline crosses.

23  
24 Later, as a professor at Central Washington University I focused my attention on  
25 the traditional land use patterns of Kittitas County in particular. This county constitutes

1 the Upper Yakima River Basin and a major portion of the middle Columbia River Basin  
2 that the proposed pipeline must cross. Through work with the Yakima Resource  
3 Management Cooperative (YRMC) I developed, with the assistance of my students, a  
4 model describing the traditional and cultural use of the lands and resources within Kittitas  
5 County by Native people. I am currently working on expanding the application of this  
6 model to the entire Columbia River Basin  
7

8  
9 **Q Are you familiar with the Yakama Indian culture, traditions and customs? If so**  
10 **how have you gained this knowledge?**

11 **A** I have a fairly extensive knowledge and understanding of the Yakama Indian culture,  
12 traditions and customs. This knowledge stems from my work with the YIN, assessing the  
13 impacts to traditional cultural places (properties) from past, present and proposed land  
14 uses. This work was done under the direct tutelage of Yakama elders, the Cultural  
15 Committee, and the YIN Cultural Program. Thus my knowledge comes directly from  
16 work with the Yakama people themselves and it is work that was focused on the  
17 Reservation, the Ceded Lands, and on their usual and accustomed places. In many ways  
18 my knowledge is most useful in assessing potential impacts to Tribal values on a specific  
19 piece of land. I attempt to continue learning from these people as I continue my research  
20 on traditional land use within the Columbia River Basin.  
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1 **Q Have you reviewed any documents relating to the proposed cross cascade fuel**  
2 **pipeline? If so what documents have you reviewed?**

3 A I have reviewed portions of the Application for Site Certification Agreement  
4 (Application) and Draft Environmental Impact Statement (DEIS) relevant to cultural  
5 resources, and the Revised Cultural Resources Assessment (1997) produced by HRA  
6 Associates.

7  
8  
9 **Q And are you familiar with the proposed route and construction methodologies to be**  
10 **used as the pipeline crosses the Upper Yakima and Mid-Columbia River Basins?**

11 A Yes. I have reviewed the proposed routes and its alternatives beginning east of the  
12 Snoqualmie tunnel down to Pasco. I am also aware of the construction techniques to be  
13 used in building this pipeline.

14  
15 **Q Can you give us a definition of a cultural resource as the Yakama People would**  
16 **define it?**

17 A The Yakama Indian Nation recognizes two broad classes of cultural resources. These are  
18 Traditional Resources, of direct importance to living and future generations of indigenous  
19 people, and Archaeological Resources, reflecting the relationship between human  
20 systems and the landscape. Although related, these types differ in their physical  
21 expression in the landscape and in the ways they have been and can be altered or  
22 enhanced by land use activities.

23  
24 Traditional Resources are the biosphere (plants, animals, fish, birds, insects  
25 reptiles), lithosphere (rocks, minerals, soils), atmosphere and hydrosphere. Traditional

1 Resources also include meaningful cultural places (site and situation) that have been and  
2 continue to be assigned meaning through use or the potential to be used. These  
3 Resources are important because they are absolutely essential to the maintenance of a  
4 living culture.

5 Archaeological Resources include all physical evidence of the composite and  
6 overlapping use of the landscape by human systems. Archaeological Resources consist  
7 of a wide variety of features, artifacts, and sediments arrayed in the dynamic context of  
8 the landscape. Importantly, these resources include landscape elements which do not  
9 contain direct evidence of human presence but do contain information on the processes  
10 and events which created the landscape. This predominantly stone and sediment  
11 testament is an expression of human behavior important to the YIN and to archaeological  
12 science.  
13

14  
15 **Q And can you provide a similar definition for a Traditional Cultural Property**  
16 **(TCP)?**

17 **A** A Traditional Cultural Property is essentially what I defined above as a Traditional  
18 Resource. Examples of these include berries, roots, medicinal plants, water, and sacred  
19 places. A TCP could be a small drainage where particular plants grow, an area where  
20 certain ceremonies are conducted, such as vision quests, an area where certain families  
21 dug for roots, or other spiritual sites. They generally are areas which have been assigned  
22 meaning by a particular culture, and which only that particular culture can ultimately  
23 assess.  
24  
25

1 **Q What types of cultural resources and/or TCP's can be found in the Upper Yakima**  
2 **and Mid-Columbia River Basins within the Ceded Area of the Yakama peoples and**  
3 **along the route of the proposed fuel pipeline?**

4 A The cultural resources present along the length of this proposed pipeline include a broad  
5 range of resources both archaeological and traditional in nature. What we see is a range  
6 of resources across this corridor from the top of Snoqualmie Pass to the Tri-Cities,  
7 spanning different seasons of use. The traditional resources range from the areas at  
8 Snoqualmie Pass which really are spring/summer/fall resource areas and involve plants,  
9 animals, fish, and big game and small game, to the areas of the Pasco Basin which  
10 involve fish and desert root crops available in the spring, and large and small game.  
11

12 It's along this gradient from high elevation mountain environments to low  
13 elevation desert environments that these traditional people made their living. The  
14 pipeline corridor itself traverses the entire seasonal round of these bands, crossing from  
15 Snoqualmie to the Pasco Basin. The path that the pipeline follows, beginning at  
16 elevations of approximately 3200 feet down to about 350 feet, is the heaviest used  
17 resource zone of that elevation gradient. My research indicates that the majority of human  
18 use in the eastern Cascades occurred from about 3,500 feet down to 350 feet. This  
19 pipeline runs down some of the higher resource value lands and runs along the Yakima  
20 River corridor and traverses and crosses many of the ecological edges in this region. The  
21 Traditional Resource values are extremely high for many of these situations particularly  
22 the forest edges, the riverine edges, and shrub steppe edges. Where the riverine edge, the  
23 forest edge, and the shrub steppe edge are in spatial coincidence we find the zones of  
24 maximum diversity. This happens in various areas along the proposed pipeline route and  
25

1 is important because these situations are high value traditional resource zones. I will  
2 speak in general terms here but the published literature contains detailed lists of plants,  
3 animals, fish, and birds that are known traditional resources, as well as a copy of the  
4 Treaty of 1855 between the Yakama People and the United States, preserving the  
5 Yakama's rights to use the area we are discussing. See Exhibit 2, excerpts from Nch'I-  
6 Wana "The Big River" by Eugene Hunn, University of Washington Press, 1990.

7  
8 The landscape which the pipeline route follows can be broken down into fairly  
9 distinct areas of Traditional Resource, or TCP, presence and use. Beginning at the top of  
10 Snoqualmie pass, and near Lake Keechelus, at the higher elevations is an area which was  
11 historically, and is currently used, during the summer and fall months for resource  
12 harvesting and cultural and religious practices. The region still contains meaning to the  
13 Yakama people in terms of landscapes and resource areas. One can expect to find, for  
14 example, berry harvesting places, fishing locations, and medicinal plants and cedar roots  
15 gathering places. There are also Archaeological properties that represent the time period  
16 from the end of the glaciation to the present. (For instance there is known Clovis  
17 material from the moraine at the downstream end of Lake Cle Elum. This indicates that  
18 the occupation of this area spans some 12,000 years.)

19 As the pipeline comes down into the river valley it crosses a variety of traditional  
20 resource zones through the Kittitas Valley. These include riparian, wet meadow, and  
21 shrub steppe resource zones. Numerous streams that contained anadromous fish combine  
22 with these zones to form a landscape rich in traditional resources. The Yakima River  
23 itself contains coho, sockeye, chinook, steelhead, and other aquatic resources – ducks,  
24 mussels, and eels. As noted above, this area contains valuable edge environment where  
25



1 Traditional Resources are more plentiful and diverse. The areas beginning just around  
2 Cle Elum through the Swauk Creek area and the Yakima River are some of the highest  
3 valued resource lands that the Tribe is interested in and that the Yakama people utilize.  
4 Of particular importance in this area are the usual and accustomed fishery, forest  
5 resources, shrub steppe resources (root crops), riparian berries, and large and small game.  
6 Importantly this region is a major large animal winter range. This area is known to  
7 contain winter villages and their associated activities marking it as a region of long  
8 tradition and intensive use.  
9

10 As the pipeline emerges from the Kittitas valley it really enters an area that is  
11 increasing in aridity, and is a major winter range area for large game. Hunting is a major  
12 activity that has and still occurs in this region. It is also an area that provides some of the  
13 earliest spring root crops to the Yakama. On southern exposures roots are often available  
14 by the end of February. The streams in this area, some of which contained anadromous  
15 fish, particularly steelhead, contained, and may still contain, riparian associations such as  
16 serviceberry, chokecherry and elderberry, all of which are Traditional Resources of the  
17 Yakama.  
18

19 As the pipeline approaches the Columbia River, near Vantage, it enters a zone of  
20 extreme aridity where precipitation often times does not exceed 8 inches in a year and a  
21 cold desert climate exists. This aridity makes all places where moisture accumulates, in  
22 ponds, springs, seeps, and stream courses, places where human activity concentrated. All  
23 of these features have been and are key locations in the Archaeological and Traditional  
24 Resource landscape. Most of the edible roots that are located east of the forest edge  
25 avoid summer heat by storing water in roots below ground, and are only easily located in

1 early spring. They are not visible the rest of the year. This region was historically  
2 populated with winter villages, particularly at the mouths of major drainages such as  
3 Johnson Creek, Whiskey Dick, and Skookumchuck. Associated with these past villages  
4 are cemeteries, longhouse locations, sweat lodges, storage facilities, sacred places, and  
5 resource extraction and processing areas. These associated features are known as a  
6 winter village complex and represent areas of intensive use. The pipeline crosses several  
7 of these intensive use zones and, in part, this accounts for the increased complexity of  
8 archaeological impacts along the Yakima and Columbia Rivers.  
9

10 Cemeteries tend to lie in talus slopes, rock shelters, alluvial terraces, flood  
11 deposits and also along ridgelines in areas of patterned ground. These patterns of burial  
12 have been observed by archaeologists and are well known by Native people. I myself  
13 have knowledge of burials in the Skookumchuck and Whiskey Dick Canyons and near  
14 the mouth of Johnson Creek . In addition, cemeteries are known to exist in and around  
15 the mouths of streams at Teanaway, Swauk, and Taneum in association with winter  
16 village complexes located there.

17 Within this region near the Columbia River, in the arid environment described  
18 above, the streams all terminate in headwater draws. These are areas where spring root  
19 camps, fall hunting camps, and traveling camps were set up. The Yakama and Wanapum  
20 camped in those areas and exploited the resources located on the ridge tops, slopes, and  
21 stream bottoms. These were areas primarily of early spring, early summer and fall use.  
22 These streams, tributary to both the Columbia or the Yakima River, often contain a  
23 stepped canyon landscape with basalt cliffs intermingled with more gentle slope deposits.  
24 The bottoms of these formations, where the water is available, are major resource  
25

1 processing and camping areas. This has resulted in high densities of archaeological  
2 deposits and traditional cultural material in stream bottoms and along ridge tops,  
3 particularly in the headwater draws of these streams. I have never been in the headwater  
4 reaches of one of these streams where I did not find archaeological material and major  
5 traditional resource use zones. For example, along ridges it is typical to find saddles or  
6 breaks in the ridge line through which large game predictably passes. In these locations it  
7 is almost certain that projectile points will be found in higher density than areas where  
8 the landscape is less restrictive to animal movement. All these saddles are usual and  
9 accustomed hunting areas.

11 It is essential to realize that the Gingko area is known for its lithic resources and,  
12 as indicated by numerous archaeological reports, it has been known and utilized for  
13 thousands of years. The region contains lithic source areas of almost unbelievable size.  
14 Often these areas are many acres in extent. This identifies these lithic source areas as  
15 traditional resource areas.

16 When you cross the Columbia River you are still in the zone of spring root  
17 gathering, winter hunting, and lithic procurement areas. There are known burials in this  
18 region, particularly along the Columbia and in the area around Crab Creek. Crab Creek  
19 was known for wetland associated plants used for various things, including tulle mats.  
20 This drainage was and still is an important spring plant gathering area. Portions of this  
21 terrain have been surveyed by a number of people, and this research shows heavy usage  
22 along Crab Creek itself as well as on the top of Saddle Mountain. The Saddle Mountains  
23 contain sacred places.

1           The Royal City area is characterized by areas of deep soil and other areas where  
2 the soil is relatively shallow. Thus this area contains a variety of root crops and other  
3 important plants. In addition there are some sand dune areas that contain special plants.  
4 Although this area is often seen as an undifferentiated area of shrub steppe habitat, it is  
5 actually a very patchy environment where plant species and growth correlates to the soil  
6 depths and moisture conditions. Some communities were dominated by big sagebrush  
7 grass, others are lithosol areas with very shallow soils. All of these contain various kinds  
8 of plant foods. Some of these are used for medicine, some for the construction of houses,  
9 longhouses or sacred structures, basket materials, clothing and other purposes.  
10 Throughout this corridor bighorn sheep occurred in patches, although they are no longer  
11 present in the area.  
12

13           I am less familiar with specific places south of the Saddle Mountains along the  
14 pipeline corridor, but I expect these same patterns to generally hold.  
15

16 **Q     How are these TCP's or other cultural resources important to the Yakama people,**  
17 **and what is their relevance to the survival of the Yakama culture and way of life?**

18 **A**     These resources and places are a significant part of what makes up the Yakama culture  
19 and are absolutely essential to the continued existence of that culture. What cultural  
20 resources and TCP's still remain are of heightened importance due to the degradation and  
21 elimination of resources caused by the continued expansion and development in this  
22 region.  
23  
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1 **Q What is the likelihood that these resources are located and will be found along the**  
2 **proposed pipeline route?**

3 A They are located and will be found along the proposed pipeline route. Some of the  
4 important plants will even be found in already disturbed areas, such as the present BPA  
5 right of way corridor.  
6

7 **Q Having reviewed the Application, DEIS and Cultural Resource Assessment, is there**  
8 **any indication that a survey was done to locate these TCP's along the proposed**  
9 **routes of the pipeline?**  
10

11 A No. A survey for TCP's was not conducted, however some TCP's may have been  
12 located incident to the archaeological survey (Cultural Assessment) and vegetation  
13 survey which were conducted. But, neither of these surveys was adequate to determine  
14 the nature, extent, and location of all TCP's in relation to the proposed pipeline route.  
15

16 **Q Please briefly describe for us the Cultural Resource Assessment that was conducted**  
17 **along the pipeline route.**

18 A The Cultural Resources Assessment provides the results from a walkover survey of  
19 nearly the entire pipeline proposed route. The survey was limited to a 200 foot corridor  
20 along the center line of the pipeline corridor, and in areas where pump stations were  
21 proposed. It was conducted in 15 to 30 meter transects. It was a survey designed to  
22 locate what I have defined as Archaeological Resources of both historic (50 –150 years)  
23 and pre-historic origins (≥150 years, or otherwise Native American in origin),  
24 investigating landscape use over a broad time period. It was not designed to identify  
25

TCP's or any sites which are currently used.

**Q Did this survey for archeological resources include any survey for TCP's?**

A No it did not specifically look for Traditional Resources.

**Q What sorts of things was the Cultural Assessment intended to locate, and what types of things did it locate?**

A Again, it was designed to locate what I have defined as Archaeological Resources, not Traditional Resources (TCP's). These archaeological resources included both historic and pre-historic properties. Examples of historic properties are things such as old refuse, cabins, old railroad tracks, or other sites which indicate past use of the landscape for irrigation, transportation, development etc... Examples of pre-historic archaeological sites include burial sites, lithic scatters, cairns, talus pits and other artifacts of Native American origin and generally older than 150 years.

The Assessment actually located 24 historic period sites and 12 pre-historic period sites, in addition to the numerous sites already on file with the Office of Archaeological and Historic Protection (OAHP). The pre-historic sites located included lithic scatters, cairn sites, and possible burials. Also reported in the assessment are some sites which the report states may or may not be eligible for listing in the National Registry. These sites included stripped cedar trees, and several rock cairns. These two items can be categorized as Traditional Resources or TCP's. The rock cairns could mark grave sites, spiritual sites, or other important cultural places. Only a Yakama or Wanapum person could properly determine the importance and purpose of these rock

1        cairns.

2                Most of these newly located sites were in the vicinity of the Columbia River and  
3        Gingko State Park.

4  
5        **Q        The Cultural Assessment already completed calls for further study of several of the**  
6        **sites it located. What sort of further study is called for, and for what purpose?**

7  
8        A        The Cultural Assessment was completed after a visual survey of the lands along the  
9        pipeline corridor. Visual surveying of a site cannot often accurately depict the breadth  
10       and depth of the site. It is likely, especially in the areas in and around the Columbia  
11       River and Gingko State Park, that the lithic scatters located by the survey, or previously  
12       registered, are very large, and much larger than what they appear to be from the surface.  
13       Further investigation is needed to accurately bound these sites and to properly mitigate  
14       for possible impacts. This follow up work must be completed, and the recommendations  
15       made in the Cultural Assessment for further study should be required to be completed.

16  
17       **Q        What is the value of these archeological sites to the Yakama people?**

18       A        All archaeological sites are religious and sacred in nature to the Yakama people. They  
19       are seen and valued as physical manifestations of Yakama ancestors within the landscape.  
20       It is believed by some Yakama people that the spirits of these ancestors are still present at  
21       these sites. In addition, but secondary to their sacred value, archaeological sites are tied  
22       directly to past use and have value in demonstrating the use of the landscape by past  
23       generations. They are testimony to patterns of use that are directly tied to traditional  
24       practices. As such, they have many different but related uses and values, including oral  
25

1 history, continued cultural practices, and Treaty right protection. However, the  
2 Yakama's insist that these sites remain undisturbed.

3  
4 **Q How is the value of these sites affected by disruption of the site, by actual**  
5 **destruction of the artifacts or by excavation and removal?**

6 **A** The Yakama people consider such disturbances as desecration and sacrilege, and believe  
7 that avoidance of these sites is the only acceptable and proper course of action. In fact, it  
8 is the policy of the YIN cultural program to not even directly touch any artifact even once  
9 it has been removed, by some other party, from the landscape. An exception to the  
10 excavation and removal of sites has been made by the YIN where a site is placed at risk  
11 of destruction by natural occurrences such as flooding or erosion, but this has been rarely  
12 applied.  
13

14 Western science does not place the same value upon these sites, and thus their  
15 disturbance is not seen as improper. In fact, western science places value on these sites  
16 for the information they can reveal about how humans functioned as a culture or group  
17 upon the landscape, how humans reacted to their particular environment, and how climate  
18 and other ecological patterns changed and varied. As such, the disturbance of these sites  
19 for purposes of excavation and, ultimately, study, is not seen as improper but instead as  
20 desirable. The western and Yakama views are at odds with one another.  
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1 **Q Are you familiar with the Vegetation Report which was completed for this project?**

2 A I am aware that a study was completed and have reviewed those portions of the  
3 Application and DEIS which discuss the results of this study, but I have not had the  
4 opportunity to review the Report itself.

6 **Q In order to effectively and properly survey for plants of importance to the Yakama  
7 people what sorts of measures or protocol need to be followed?**

9 A A survey must be done by visually inspecting plant growth on the surface of the land.  
10 However, timing and frequency of such visual surveying is crucial to the success of such  
11 a survey. For example, in the shrub steppe region, several surveys must be done from  
12 February through June in order to insure that any plants actually present are located, due  
13 to the varying growth patterns of the different plants used by Native peoples. In addition,  
14 it is crucial that any survey for TCP's be tied to interviews with Tribal elders concerning  
15 traditional use areas and other sacred sites. Only by following these measures can a  
16 survey adequately indicate the presence of these plants used and revered by native  
17 peoples such as the Yakama.

19 **Q Based upon your review of the DEIS and Application and their discussions of this  
20 Vegetation Report, does it appear that these methods were implemented, and were  
21 any TCP's located as the result of this study?**

23 A The table within the DEIS (Table 3.3-1, page 3-40) lists only 70 species of plants located  
24 as the result of this study along the entire pipeline corridor and within the many different  
25 habitat types that corridor crosses. Many of the pants inventoried are of technological

1 and possible medicinal use to Native Americans, in accordance with their traditional  
2 practices. However, the diversity of food species listed in these tables is very low. Only  
3 two lomatium species (desert root crops still dug for and eaten by the Yakama), out of at  
4 least 10 species historically located in the shrub steppe habitats of this region, were  
5 identified in this study. This list should be much more diverse and extensive. Even in  
6 disturbed areas, such as the BPA Right Of Way corridor, certain native species used by  
7 the Yakama can grow. These limited findings and the lack of diversity lead me to believe  
8 that this study was not completed in a manner which would adequately indicate the  
9 presence of plants which function as traditional resources for the Yakama people.  
10 Supporting this belief is the fact that there is no discussion of effects to Native American  
11 use of these plants within the section of the DEIS and Application which discuss plant  
12 life.  
13

14  
15 **Q Are you able to identify where different types of TCP's are actually located in**  
16 **relation to the proposed pipeline corridor?**

17 **A** No, not definitively or completely. However, I can tell you that there are areas of  
18 shallow stony ground that contain important plants, lomatium, garlic, onions, and bitter  
19 root. There is a complex of traditional plants which thrive in those kinds of soil areas. In  
20 the deeper soils you will find more deeply rooted traditional plants, such as balsam root.  
21 Huckleberries will grow in forest areas which have been subjected to fire. One can  
22 differentiate between the kinds of settings and types of resources in this general way.  
23 The fact is that this pipeline will run directly through the main corridor of land which still  
24 contains resources utilized by the Yakama people. I do have knowledge of some such  
25

1 sites which I can place in relation to the pipeline, but in order to adequately and  
2 accurately locate these resources a properly designed survey must be completed. The  
3 surveying and analysis done to date, for other purposes, is inadequate to do so. Finally,  
4 none of the surveys already completed account in any way for sacred religious sites used  
5 by the Yakama people.

6  
7  
8 **Q What are the possible and foreseeable impacts of constructing this pipeline upon the**  
9 **TCP's which you have identified as likely being present along the pipeline route?**

10 **A** Clearly the impacts to TCP's will depend upon the type of TCP affected and its proximity  
11 to the construction corridor. Sacred sites, such as vision questing places, could be  
12 completely destroyed by their removal, damage caused by excavation, or simply by  
13 disturbance. Plants, including different roots, berries, and medicinal plants, would likely  
14 be destroyed and prevented from re-growing by digging activities, compaction of soils  
15 caused by heavy machinery, alteration in the flow of water across the landscape,  
16 increased erosion, and other ground disturbance from human activities. In addition, the  
17 ground disturbance caused by construction can create a pathway for the migration and  
18 movement of noxious weeds and exotic plants, particularly cheat grass. This could then  
19 negatively influence native plant populations.

20  
21  
22 **Q Are these potential impacts limited to the pipeline construction corridor, or can they**  
23 **extend beyond the bounds of the area in which digging and other ground**  
24 **disturbance will take place?**

25 **A** The impacts to certain Traditional Resources will extend beyond those areas directly

1 disturbed by construction. In many rocky lithosol areas the traditional plants growing  
2 there are highly dependant upon ground water seeping and moving across and through  
3 the soil. Either digging or compaction activities can break the flow of this water across  
4 the landscape and have the potential to affect plant survival across larger areas and extend  
5 well beyond the areas physically disturbed. Re-routing or disruption of the surface, soil  
6 water, and ground water flows along the pipeline corridor could potentially affect several  
7 acres beyond the limits of the corridor. The extent of such impacts will vary depending  
8 on the physical aspects of the specific landscape. The DEIS alludes to this type of effect,  
9 where it states that slumping and or washing are possible, but cannot be specifically  
10 predicted. Again, a survey needs to be completed in order to accurately assess the  
11 potential for this type of impact.  
12

13  
14 **Q Is it possible to restore these areas effectively? Why or Why not?**

15 **A** In most cases it will not be possible to restore these areas effectively. These are easily  
16 disturbed plant communities. Things such as bitter root will probably never grow there  
17 again. However, it is true that some traditional native plants will grow in disturbed areas.  
18 But, for those plants which are sensitive to and highly dependant upon water flows,  
19 ground, surface or soil water, restoration is highly unlikely, because it is very difficult to  
20 repair and restore these hydrological systems. A good example of the long term effects  
21 of this type of activity is the seismic testing which was conducted in the 1970's for oil  
22 exploration near the Columbia River and Gingko State Park. The seismic tamper lines  
23 are still visible in that region, the compaction is still present, and the vegetation has been  
24 so altered along those strips that native vegetation patterns have yet to be re-established.  
25

1 **Q Can cultural or religious value be permanently destroyed through disturbance, or is**  
2 **it possible to restore this value?**

3 A There is no question that religious values will be destroyed permanently. Just the  
4 pipeline's presence in the ground upon or near a sacred site affects the sacred value of the  
5 site. A description of exactly how that disturbance or destruction is felt is something that  
6 only a the Native person(s) involved with that particular place could answer. But the site  
7 is permanently altered and changed. For example the Saddle Mountains contain known  
8 vision quest areas. I cannot answer how the presence of the pipeline located below these  
9 places along Crab Creek may impact the sacred nature of the religious practices that  
10 continue there. I can say that this and several related questions need to be answered by  
11 direct involvement of the people who have direct knowledge of and participate in the use  
12 of these places.  
13  
14

15 **Q Are you familiar with Gingko State Park, the petrified forest located there, and the**  
16 **areas surrounding these landmarks?**

17 A Yes, I am.  
18  
19

20 **Q Have you reviewed the project proposals relating to these areas?**

21 A Yes I have.  
22  
23  
24  
25

1 **Q Do the petrified forest or areas near this landmark have particular significance to**  
2 **the Yakama people?**

3 A The areas near Vantage, along the Columbia River, and in and around what is now called  
4 Gingko State Park have historically been used by the Yakama people for thousands of  
5 years and do hold cultural value. There are root grounds, hunting grounds and sacred  
6 sites throughout this area whose use dates back a very long time. The petrified material  
7 was the major material source for stone tool manufacture. As a result of these and other  
8 uses, there are burials in varying and often unknown locations.  
9

10 Currently this area is still used by the Yakama and Wanapum people for spring  
11 root gathering, and for hunting. The plants and animals gathered from this area are then  
12 used in subsistence, and ceremonial and traditional religious feasts. The traditional  
13 resources in this area are an integral part of the Yakama and Wanapum religions.  
14

15 **Q What types of cultural resources do you know to be located in these areas?**

16 A The same types of Traditional and Archaeological resources which I described earlier  
17 will also be found in this area. As I said, it is an area of extensive historic and current  
18 cultural use.  
19

20 **Q Compared to other areas along the pipeline route, is the area near the Columbia**  
21 **River, including and surrounding Gingko State Park, likely to contain greater**  
22 **numbers of TCP's or other cultural resources?**

23 A Yes. The area is known and still used as a resource area. Historically, there was a higher  
24 population density at certain seasons of the year along the Columbia River and in and  
25

1 near what is now Gingko State Park. It is an area known to have winter village  
2 complexes. The use of that area, given its proximity to known winter villages, is  
3 extremely high. Consequently, the density and diversity of TCP's and Archaeological  
4 sites should be quite high. However, I would note that the area surrounding Swauk  
5 Creek, where the pipeline will also cross, is an area of even higher diversity and  
6 traditional resource values.  
7

8  
9 **Q Does the presence of sites in this area speak to the significance of this area to the**  
10 **Yakama people?**

11 A Yes, it is testimony to the traditional use of the area in both past and at present.  
12

13 **Q If digging a trench several feet deep is going to occur, is there any way to avoid**  
14 **damage to the resources located in and surrounding the Columbia River crossing**  
15 **and Gingko State Park?**

16 A No, and the DEIS acknowledges this. The resources located in Gingko are vast and  
17 pervasive, and it is highly unlikely that they can be completely avoided. However,  
18 damage to resources can be minimized by surveying for both Archaeological and  
19 Traditional Resources, and having a proper understanding of the resources, and possibly  
20 aligning the pipeline with already disrupted areas such as road beds.  
21

22  
23 **Q Is it possible to locate all of the resources along the pipeline route by a survey?**

24 A No, invariably there will be cultural resources which are only located during construction  
25 of the project. Surveying is rarely able to detect all of the resources actually located

1 within the project area. However, a properly designed survey and follow up research  
2 could provide information to enhance mitigation.

3  
4 **Q Is it reasonable to expect that resources will be discovered during construction**  
5 **which will not have been located during a survey?**

6 A Yes, it is certain this will happen, and it is necessary that a cultural specialist and  
7 professional archaeologist be on hand during construction activities. Only these trained  
8 people can identify cultural resource material be it Archaeological or Traditional in  
9 nature.  
10

11  
12 **Q When such resources are discovered what does the Yakama Nation believe the**  
13 **proper protocol to be and why?**

14 A The primary belief of the Yakama people is that these sites should be avoided and  
15 protected in place. Where disturbance occurs unexpectedly the first step is to stop work  
16 immediately within the vicinity of the resource. Second, the Yakama Indian Nation and  
17 other appropriate governmental agencies need to be notified immediately. Appropriate  
18 action from that point will depend somewhat upon the type of resource located and the  
19 amount of damage that was inadvertently caused. A professional archaeologist and  
20 cultural specialist must evaluate the site. The YIN asserts that these resources should be  
21 left where they are, restored as much as possible and then avoided from that point  
22 forward. This is the only way to protect their sacred value. In addition, certain  
23 ceremonies may need to be conducted, for instance if a burial site is disrupted.  
24 Restoration and avoidance are the only option where burial sites are disturbed.  
25



1           However, it is recognized that re-routing the project in order to avoid these sites  
2           may not always be possible. In addition, damage to the site may be so extensive that  
3           restoring it is infeasible. In those cases where no other option is available, and the site is  
4           not a burial or other highly sacred site, the YIN has acquiesced to professional excavation  
5           of a site, with curation of any artifacts or properties removed, which relate to the Yakama  
6           people, in the Yakama Nation Heritage Museum. This should be considered as a last  
7           option only. Normally a process is set up by which all involved parties can come to  
8           agreement on how to treat the site, with dispute resolution being required if agreement  
9           cannot be reached. Finally, any site located should be properly registered with OAHP,  
10          and all information concerning the site must be kept confidential.  
11

12  
13 **Q     In your review of the documents related to the proposed pipeline have you seen any**  
14 **proposed protocol for this type of situation?**

15 **A     No, not that would address the concerns of the Yakama Indian Nation or that are specific**  
16 **to Traditional Resources (TCP's). There are, of course, established protocols for dealing**  
17 **with National Register sites or sites discovered while construction activity is occurring.**  
18 **These operate through the State Office of Historic Preservation.**  
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1 I declare under penalty of perjury under the laws of the State of Washington that the above  
2 testimony is true and correct to the best of my knowledge and belief.  
3  
4

5 Dated this 12<sup>th</sup> day of March, 1999.  
6

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Morris L. Uebelacker  
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